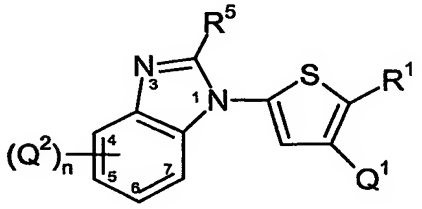
CLAIMS

1. A process for preparing a compound of formula (I):



I

wherein:

$R^1$ is selected from the group consisting of H, alkyl, alkenyl, alkynyl, $-C(O)R^7$, $-CO_2R^7$, $-C(O)NR^7R^8$, $-C(O)N(R^7)OR^8$, $-C(O)N(R^7)-R^2-OR^8$, $-C(O)N(R^7)-Ph$, $-C(O)N(R^7)-R^2-Ph$, $-C(O)N(R^7)C(O)R^8$, $-C(O)N(R^7)CO_2R^8$, $-C(O)N(R^7)C(O)NR^7R^8$, $-C(O)N(R^7)S(O)_2R^8$, $-R^2-OR^7$, $-R^2-O-C(O)R^7$, $-C(S)R^7$, $-C(S)NR^7R^8$, $-C(S)N(R^7)-Ph$, $-C(S)N(R^7)-R^2-Ph$, $-R^2-SR^7$, $-C(=NR^7)NR^7R^8$, $-C(=NR^7)N(R^8)-Ph$, $-C(=NR^7)N(R^8)-R^2-Ph$, $-R^2-NR^7R^8$, $-CN$, $-OR^7$, $-S(O)_fR^7$, $-S(O)_2NR^7R^8$, $-S(O)_2N(R^7)-Ph$, $-S(O)_2N(R^7)-R^2-Ph$, $-NR^7R^8$, $N(R^7)-Ph$, $-N(R^7)-R^2-Ph$, $-N(R^7)-SO_2R^8$ and Het;

Ph is phenyl optionally substituted from 1 to 3 times with a substituent selected from the group consisting of halo, alkyl, -OH, $-R^2$-OH, -O-alkyl, $-R^2$-O-alkyl, $-NH_2$, -N(H)alkyl, $-N(alkyl)_2$, -CN and $-N_3$;

Het is a 5-7 membered heterocycle having 1, 2, 3 or 4 heteroatoms selected from N, O and S, or a 5-6 membered heteroaryl having 1, 2, 3 or 4 heteroatoms selected from N, O and S, each optionally substituted from 1 to 2 times with a substituent selected from the group consisting of halo, alkyl, oxo, -OH, $-R^2$-OH, -O-alkyl, $-R^2$-O-alkyl, $-NH_2$, -N(H)alkyl, $-N(alkyl)_2$, -CN and $-N_3$;

$Q^1$ is a group of formula: $-(R^2)_a-(Y^1)_b-(R^2)_c-R^3$

a, b and c are the same or different and are each independently 0 or 1 and at least one of a or b is 1;

n is 0, 1, 2, 3 or 4;

$Q^2$ is a group of formula: $-(R^2)_{aa}-(Y^2)_{bb}-(R^2)_{cc}-R^4$

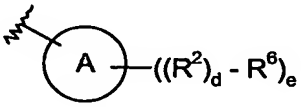
or two adjacent $Q^2$ groups are selected from the group consisting of alkyl, alkenyl, $-OR^7$, $-S(O)_fR^7$ and $-NR^7R^8$ and together with the carbon atoms to which they are bound, they form a $C_{5-6}$cycloalkyl, $C_{5-6}$cycloalkenyl, phenyl, 5-7 membered heterocycle having 1 or 2 heteroatoms selected from N, O and S, or 5-6 membered heteroaryl having 1 or 2 heteroatoms selected from N, O and S;

aa, bb and cc are the same or different and are each independently 0 or 1;

each $Y^1$ and $Y^2$ is the same or different and is independently selected from the group consisting of -O-, $-S(O)_f-$, $-N(R^7)-$, -C(O)-, -OC(O)-, $-CO_2-$, $-C(O)N(R^7)-$, $-C(O)N(R^7)S(O)_2-$, $-OC(O)N(R^7)-$, $-OS(O)_2-$, $-S(O)_2N(R^7)-$, $-S(O)_2N(R^7)C(O)-$, $-N(R^7)S(O)_2-$, $-N(R^7)C(O)-$, $-N(R^7)CO_2-$ and $-N(R^7)C(O)N(R^7)-$;

each $R^2$ is the same or different and is independently selected from the group consisting of alkylene, alkenylene and alkynylene;

each $R^3$ and $R^4$ is the same or different and is each independently selected from the group consisting of H, halo, alkyl, alkenyl, alkynyl, $-C(O)R^7$, $-C(O)NR^7R^8$, $-CO_2R^7$, $-C(S)R^7$, $-C(S)NR^7R^8$, $-C(=NR^7)R^8$, $-C(=NR^7)NR^7R^8$, $-CR^7=N-OR^7$, $-OR^7$, $-S(O)_fR^7$, $-S(O)_2NR^7R^8$, $-NR^7R^8$, $-N(R^7)C(O)R^8$, $-N(R^7)S(O)_2R^8$, $-NO_2$, -CN, $-N_3$ and a group of formula (ii):




ii

wherein:

Ring A is selected from the group consisting of $C_{5-10}$cycloalkyl, $C_{5-10}$cycloalkenyl, aryl, 5-10 membered heterocycle having 1, 2 or 3 heteroatoms selected from N, O and S and 5-10 membered heteroaryl having 1, 2 or 3 heteroatoms selected from N, O and S

each d is 0 or 1;

e is 0, 1, 2, 3 or 4;

each $R^6$ is the same or different and is independently selected from the group consisting of H, halo, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, Ph, Het, $-CH(OH)-R^2-OH$, $-C(O)R^7$, $-CO_2R^7$, $-CO_2-R_2-Ph$, $-CO_2-R^2-Het$, $-C(O)NR^7R^8$, $-C(O)N(R^7)C(O)R^7$, $-C(O)N(R^7)CO_2R^7$, $-C(O)N(R^7)C(O)NR^7R^8$, $-C(O)N(R^7)S(O)_2R^7$, $-C(S)R^7$, $-C(S)NR^7R^8$, $-C(=NR^7)R^8$, $-C(=NR^7)NR^7R^8$, $-CR^7=N-OR^8$, =O, $-OR^7$, $-OC(O)R^7$, $-OC(O)Ph$, $-OC(O)Het$, $-OC(O)NR^7R^8$, $-O-R^2-S(O)_2R^7$, $-S(O)_fR^7$, $-S(O)_2NR^7R^8$, $-S(O)_2Ph$, $-S(O)_2Het$, $-NR^7R^8$, $-N(R^7)C(O)R^8$, $-N(R^7)CO_2R^8$, $-N(R^7)-R^2-CO_2R^8$, $-N(R^7)C(O)NR^7R^8$, $-N(R^7)-R^2-C(O)NR^7R^8$, $-N(R^7)C(O)Ph$, $-N(R^7)C(O)Het$, $-N(R^7)Ph$, $-N(R^7)Het$, $-N(R^7)C(O)NR^7-R^2-NR^7R^8$, $-N(R^7)C(O)N(R^7)Ph$, $-N(R^7)C(O)N(R^7)Het$, $-N(R^7)C(O)N(R^7)-R^2-Het$, $-N(R^7)S(O)_2R^8$, $-N(R^7)-R^2-S(O)_2R^8$, $-NO_2$, -CN and $-N_3$;

wherein when $Q^1$ is defined where b is 1 and c is 0, $R^3$ is not halo, $-C(O)R^7$, $-C(O)NR^7R^8$, $-CO_2R^7$, $-C(S)R^7$, $-C(S)NR^7R^8$, $-C(=NR^7)R^8$, $-C(=NR^7)NR^7R^8$, $-CR^7=N-OR^7$, $-OR^7$, $-S(O)_fR^7$, $-S(O)_2NR^7R^8$, $-NR^7R^8$, $-N(R^7)C(O)R^8$, $-N(R^7)S(O)_2R^8$, $-NO_2$, -CN or $-N_3$;

wherein when $Q^2$ is defined where bb is 1 and cc is 0, $R^4$ is not halo, $-C(O)R^7$, $-C(O)NR^7R^8$, $-CO_2R^7$, $-C(S)R^7$, $-C(S)NR^7R^8$, $-C(=NR^7)R^8$, $-C(=NR^7)NR^7R^8$, $-CR^7=N-OR^7$, $-OR^7$, $-S(O)_fR^7$, $-S(O)_2NR^7R^8$, $-NR^7R^8$, $-N(R^7)C(O)R^8$, $-N(R^7)S(O)_2R^8$, $-NO_2$, -CN or $-N_3$;

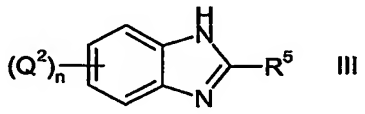
$R^5$ is selected from the group consisting of H, halo, alkyl, cycloalkyl, $-OR^7$, $-S(O)_fR^7$, $-NR^7R^8$, $-NHC(O)R^7$, $-NHC(O)NR^7R^8$ and $-NHS(O)_2R^7$;

f is 0, 1 or 2; and

each $R^7$ and each $R^8$ are the same or different and are each independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl and cycloalkenyl;

or a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof;

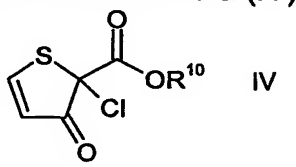
said process comprising the steps of reacting one equivalent of a compound of formula (III):



III

or an acid addition salt thereof,

with one equivalent of a compound of formula (IV):



IV

wherein $R^{10}$ is selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl and suitable carboxylic acid protecting groups;

in the presence of a base additive.

2. The process according to claim 1, wherein said base additive is selected from the group consisting of sodium bicarbonate, triethylamine, sodium acetate, *N*-methylimidazole, pyridine and *N*-methylbenzimidazole.

3. The process according to claim 1, wherein said base additive is sodium bicarbonate.

4. The process according to claim 1, wherein said base additive is *N*-methylimidazole.

5. The process according to claim 1, wherein said reaction is carried out in an inert solvent.